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PROCUREMENT AND ASSIGNMENT*

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The Procurement and Assignment service is a service which was created at the request of the medical profession. I will just sketch briefly the history of this service from its inception.

In June, 1940, the Surgeons-General of the Army and Navy asked the American Medical Association to make a careful study of available medical manpower of the nation. From that there grew a Medical Preparedness Committee or committees, throughout the nation, with a central committee in Washington, which was part of the Office of Health and Welfare of which the Administrator was Gov. Paul McNutt. Subsequently, when the War Manpower Commission was called into being, the Procurement and Assignment became a part of the War Manpower Commission.

Now the purpose behind the formation and the request that such an organization be formed was simply that the medical profession desired to supply the armed forces with what they needed, on a voluntary rather than a draft basis. The service has been "cussed" more than discussed. I am sure you all know that. But the fact remains that any given voluntary system must have shortcomings, and for which the Procurement and Assignment has been accused.

It assumes every member is willing to take his place in the voluntary program, and at any point it breaks down where a member of the profession fails to take his place, and has to have substituted for him another man who is next in line, and who, possibly, in the long run, could stay at home and should stay at home, but must go to war because we have adopted a voluntary plan. Just as with any

other voluntary plan, such as contributions to a community fund or anything else, if one member of the society does not fulfill his obligations, some one else must make up for it.

Having that in mind, we had in the Procurement and Assignment service at first a rather sound organization, because it had been in existence in those various centers, in the various medical organizations throughout the country. It had then, in addition to that, an official position by virtue of the fact that it was a Federal war agency.

The program went along fairly well, but not good enough to suit the Army, and therefore for a brief period of time, in 1942, they circumvented availabilities which had been used as the basis of asking men to voluntarily apply for commissions in the armed forces, which disrupted the program and took the wrong men out of the wrong places. When the directing board of the Procurement and Assignment was able to successfully request the cancellation of the medical officers' procurement boards, which the board was operating, a great deal of damage had already been done. Some communities did not have enough men, while other communities that could spare men still had a comfortable surplus.

In establishing the service at the request of the profession, the Executive Order read that the service would be responsible for supplying the armed forces and non-military governmental agencies, without disturbing too greatly civilian medical care. Therefore, when we took stock after we took over, we found that we had a double problem, of replacing those men taken from the communities from which they should not have been taken, as well as taking from communities which could still spare men. That meant that in January of 1943 we felt ourselves limiting additional declarations of availability to twenty-one states, and that meant that by January of 1944, we were limiting recruiting

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or declarations of availability of members of the medical profession, to about twenty-one cities. In other words, it was a gradual program as far as cutbacks were concerned, and during 1944 we began to scrape the bottom of the barrel in every sense of the word, and the Army was not satisfied and the Navy was far from satisfied.

Recruitment at that time took on a very special individualistic characteristic. We no longer worked with any such thing as quotas, because it was totally unrealistic, and we studied each individual separately to see if he could be spared from the community: it was a job to supply the Army and Navy with the personnel they said they needed.

In that connection there has been considerable criticism with respect, that is, in recent months, not only with the present utilization of the medical profession in the armed forces, but in the actual numbers they had when the war was on in both Germany and Japan. This criticism obviously reflected on Procurement and Assignment Service, because if it is true that we let the Army and Navy have too much, too many men, and didn't have enough men to take care of civilians, we had failed in our mission.

I would like to point out two things in defense of the organization. First, at a time when there is active warfare going on all over the world, who is to say that the Army has too many physicians or that the Navy has too many? Who, for that matter, is to say that the Army and Navy have too many cans of soup or too many pairs of shoes or too many rations for their men, or too many uniforms, or too much clothing—for the commanding officer in charge of the theatre of operation is responsible for having enough. If he figures he needs 100 units and orders 200 units, and gets into the heat of battle and finds he needs 400, then his calculations are wrong, and he is in a very unenviable position. On that basis I think it is easy to understand why there obviously must be, not only with supply of personnel but with supply of things of a material nature, a tremendous excess available to meet such situations and to leave each theatre commander with what he considers to

be somewhere near enough to carry on his end of the war.

The second point I want to mention in connection with that question as to whether or not there were too many men in the Army and Navy and not enough in civil life, is that the Procurement and Assignment Service had no way of knowing that in Dover or Newark there would be five men die during the course of the year, because of course they didn't know there would be so many men dying of coronary attacks or automobile accidents, and so forth, or incapacitated—thus affecting civilian medical care. They had been declared on the basis of the available manpower existing in the communities at the time the man was available and the maintaining of a satisfactory surplus for meeting such emergencies would have resulted in an additional number of men in the service and would have been on an unsound basis in any case, since there was no way of forecasting exactly what the situation would be in those communities.

Now to continue just a moment with the question of whether or not there are too many men in the medical departments of the Army and Navy. I don't care to discuss utilization. It is not good. Utilization of anything in war time is not good. There is nothing efficient about warfare. It is the most completely inefficient endeavor that mankind engages in, but let us stop and look at the record.

The morning papers carried a rather complete report from General Marshall. There you will note that the recoveries from wounds were just twice as great as in World War I, that the deaths due to disease were just half as great as in World War I, and 58.8 per cent of the men who received the benefits of the medical departments of the Army and Navy were returned to theatres of operation for active combat duty. The record stands alone and if the efficiency was not great and the utilization was not great, I think we can pass it by—and I say that advisedly, because as I have mentioned before, there is nothing less efficient than warfare.

That brings us to some extent to the present time, when we still have in the Army some 43,000 physicians, with the wars over in both theatres. We have to remember or realize,

first, that the Army is planning to carry out its program of giving each man before he is discharged, as good medical care as he can have, so that they have done as much in the way of rehabilitation and maintenance, or rather re-establishment of his physical well-being, as it is possible to do.

In spite of that I think it is perfectly obvious to everyone that there are now too many men in the Army and Navy medical departments and that they are not coming out very fast. The point I want to mention there is the part that Procurement and Assignment Service plays in that. We have a responsibility of returning these men to civilian life as rapidly as possible; therefore we are constantly working with the Army and Navy on that basis. The Army and Navy have established a point system which in justice to the officers—most of them, not all of them, since no point system can affect all men equally—is reasonably good. But it does not answer the problem of civilian medical care any more than the problem of supplying the Army was answered when a man in a community refused to go. We went to the next man and said, "It is your turn, because this community can still spare physicians." Now we say to the Army, "All right, you discharged 7,000 men"—which was what they were talking after V-E Day. After V-J "we will discharge 17,000 men by so and so." "That is fine, but if all the men go back to Chicago and New York, we are just as bad off as we are today."

Therefore we desired to request men who are urgently needed in the communities where the last physician has died or the specialist has had an illness that prevents him from giving service to the community. Those services come under Section 3 of the War Department Circular 290. There is constant pressure on my office every day from all angles—everything from chambers of commerce to senators and congressmen, and also our state chairmen who also have felt the pressure of that thing.

Now then, we have within the past week adopted a program where it will take far less time to get a man out of the service. We have established a checking system with the Surgeons-General, to know immediately when

the man returns to the communities. Here is a Dr. Jones, urgently needed in Dover. In the meantime Dr. Smith comes back to Dover. The situation is then partially relieved and the necessity of Smith's returning is not as urgent as a Dr. Brown for Newark. That is the type of thing we are dealing with at the present time. At the same time we are perfectly willing to go along with the Army in so far as possible on our point system since the men feel it is more fair on the basis of a utilization program. That is one of the big problems that we still have left. The Directing Board is anxious to close up as fast as they can. It is a war agency, established at the request of the profession, but they are convinced that the profession had no desire to continue a federal agency engaged in activities of this kind during peacetime. So as soon as we can close up, we will.

The other big problem that presents itself to the service today is the question of resident physicians in the American hospitals. It soon became apparent that there would be 80 per cent of graduating classes engaged or called for active duty after 12 months of internships. That meant for three months hospitals would have double staff and for the balance of the year would be out of luck. It meant something far more important, however; it meant there would be practically no residents available for the American hospitals since of these graduates practically every one of them would leave after 12 months of internship. Therefore the 9-9-9 Program was established and its purpose was to get the additional men necessary for the American hospitals so that they could continue to operate on something similar to a peacetime basis. The program as originally designed was that each graduate would serve half of his nine months in residency, junior residency, and half in senior residency. It is not satisfactory from the standpoint of good operation or from the standpoint of education, but it was an alternative to something which was far worse. That would be practically no residency. Actually, we are only able to get one-third from the Navy as junior residents and one-half as junior residents. The war is over and theoretically we could close the 9-9-9 Program to

morrow morning, but actually as each closes his residency or internship, he will be called to active duty as a replacement, war or no war.

The war is over but these men are still going to be called. How long are we going to continue, therefore, to be active in this field of operating what is essentially a wartime program and how long are we going to prevent a return to a peacetime basis in our hospitals? Only so long as it is absolutely necessary. Only so long as the Army and Navy can control the available supply.

Then can anything be done in the meantime to start the reconversion? And the answer is yes. Presumably on April 1 those interns who are officers in the Army and Navy and who will have at that time completed 9 months of hospital service and are interns, will continue to be interns for an additional three months. Those men who are serving the second 9 months of hospital experience and are commissioned officers and finished 9 months, and are junior residents, will also continue until July 1st. Those men now serving the third 9 months, the senior residents, will complete that 9 months and will be the first to be called immediately to active duty. The reason that is necessary is that the discharge program which the Surgeons-General have set up on the point system takes out of the Army the majority of the men especially qualified and of eminent reputation in medicine, and leaves the Army with a relatively young nucleus, and therefore they must have the service of the man who has had at least 27 months of hospital experience if they are going to do a satisfactory replacement, in any sense of the word. Then on July 1st, these interns who have at that time finished 12 months of internship, and the junior residents who have done the same, will be called to active duty except in exceptional cases, those who can show beyond question of doubt that they have carefully reviewed, first, the entire available supply of veterans—women and men—who have been already disqualified or/and have not been able to find in any groups some one to fill a position. That applies to both the intern and the junior resi-

dency groups. Otherwise those men will go to active duty July 1st.

What happens to the graduating class in April, which comes along and begins to show up now on a 12-month internship basis as an overlap group, which is the one thing we avoided with the 9-9-9 Program? The hospitals will be expected to call those men for internships upon graduation on April 1st. They will be assigned to active duty in that institution as rapidly as possible, but not until 12 months from July, 1946, the reason being that it will be necessary to overlap them for that period in order to adjust them to the hospital schedule before, or after July 1st, when there will be few senior residents. Therefore that period is necessary to make this change. Overlap is not good; it means hospitals must double feed or house for that time, but nevertheless at some time we have got the three month overlap. These two programs, the return of men to critical areas to re-establish their practices, and continuation of satisfactory or reasonable hospital staff, are the two things that are keeping Procurement and Assignment service open and keeping it going; otherwise we would be closed right now. It will be closed as rapidly as it can be; I assure you.

Now just one word in relation to Delaware. Procurement and Assignment service in Delaware has been satisfactorily operated. I say that without question, because I happen to sit in the one office where the complaints come in regard to the operation of our program—and they come from every one, from state medical societies to senators and congressmen—and there has been little if any complaint regarding the situation in Delaware. That is a well operated show. It is a fine job and I cannot close without a word of thanks and appreciation to Dr. Speer and his committee because we know how much it means to the men who stayed at home and carried a double load.

DISCUSSION

MEMBER: I would like to ask Dr. Barton what provision will be made for the men returned and discharged from the service to get an internship if most of the internships are

going to be filled by men graduating from the medical school?

DR. BARTON: Presumably you are speaking of men who had internships before they entered the service. I have just finished pointing out there will be no deferments on July 1st unless the hospital has reviewed every man who has a service, active combat record and could not make a satisfactory arrangement. Now in addition to that there are the men who are still in the service and who because of the cutbacks which are possible, can be spared by the medical department of the Army but can not get it, will be given the opportunity of telling the Surgeon General they desire a residency in Neurology at Bellevue or what have you, and the Surgeon General can present that application of the veteran to that hospital and if acceptable to them and the man on the job passes on him, there will be an interchange between the two of them.

DR. W. H. SPEER (Wilmington): I just wish that about 250,000 people in Delaware could have heard Dr. Barton this morning. Of course you men know that I have had charge of this program ever since the war started, and we have tried to do the best possible, taking care of the communities as well as we could and at the same time furnishing the greatest number of men to the service that we could. In spite of that it has been difficult to convince a lot of doctors and a lot of Rotary Club men and a lot of Kiwanis Clubs that the situation while not perfect was the best that could be obtained.

Two days after V-J Day I had, from one of the towns down the state, a delegation to come over to my place down on the Chesapeake, with a petition signed by at least five thousand people. They started off "Now that the war is over we want three doctors back right away"—over night! It is very difficult to get across to the layman that the Army has to process these men and that it has to be done in a certain way, and that you just can't write to Dr. Barton and say "Send Jim Jones home or somebody else," and, as I say, I wish that the people could have heard what he said this morning, because I

CLINICAL CASES FROM THE HOSPITALS

HYPERINSULINISM*

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An adequate definition of the condition which we now recognize as hyperinsulinism is that it is a disease of the pancreas in which there is an excessive amount of insulin produced with resultant clinical manifestations that are easily interpreted. This disease can be due to functionally overactive islet cells, to a hyperplasia of these islet cells, or to tumors, either benign or malignant.

Historically, Langerhans, in 1869, discovered the islet tissue in the pancreas. In 1921, Banting¹ and his associates, with the discovery of insulin, noted the hypoglycemic effects of an excessive amount of insulin. Harris², in 1924, published three cases of hypoglycemia and used the term "hyperinsulinism" as the name of the then-new clinical entity. He stated that the overactive islet cells produced hypoglycemia with symptoms typical of hyperinsulinism. Wilder³, in 1927, in one of the first operative cases, recovered insulin from islet cell cancer and even from metastatic growths in the liver of this islet cell cancer. The first surgical cure of adenoma of the pancreas was reported by Howland⁴ in 1929. In 1934, a review of 18,000 admissions to the Veterans Administration Hospital revealed only one case of the disease. Keppler and Moersch⁵,

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* Read before the Staff Meeting, St. Francis Hospital, November 2, 1945.

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know that they would take an entirely different attitude on the thing.

The only thing that we know is that before the first of the year a great many men will be back. They are coming back now, here, in this state. I heard of two or three this morning that I didn't know had even returned and the situation is going to lighten very much in the very near future.

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reviewed a group of 21 cases of the Mayo clinic. David⁶, in 1940, reviewed 35 cases in which surgery upon the pancreas had been performed. More recently, in 1941, Keating and Wilder⁷ reported 44 cases of islet tumors. Up to 1942, Whipple⁸ was able to collect 158 cases of tumor of the islet of Langerhans. A series of 99 cases was reviewed recently from both the American and the English literature by Malamud and Grosh⁹. Walker and Boyer¹⁰ recently, after reviewing the literature, described 10 cases of hypoglycemia and added two cases of their own of adenoma of the pancreas.

The symptomology encountered in this disorder varies greatly. Most cases are gradual in onset, although some cases are first seen in an acute episode of hypoglycemia with a syncope attack or a complete loss of consciousness. Usually, however, the case may go on for months or years. Many of the symptoms are referable to the nervous system, others to the gastro-intestinal tract. Among the symptoms may be included nervousness, irritability, fatigue, flushing, sweating—all suggesting psychoneurosis; a sensation of weakness, of hunger, dizziness, relief on taking food, symptoms frequently found in gastro-intestinal disorders. In severe cases one also finds mental confusion, generalized or localized spasms, convulsions, and loss of consciousness.

CASE REPORT

We recently encountered a case that complained of a group of symptoms such as outlined above. The following is the case history of the patient upon whom a diagnosis of hyperinsulinism was made and upon whom a subtotal pancreatectomy was done.

Charles J., a nineteen-year-old white male, was admitted to the St. Francis Hospital for observation on July 31, 1945. He complained of repeated attacks of acute dyspnoea and extreme nervousness for several years. These attacks would be associated with a chilly sensation and numbness and tingling in all the extremities. Some disturbed sensation in the right arm persisted for several days following one of these acute episodes. His home life was definitely undesirable, his mother having died two years before and the boy having left

home because of continuous arguments with his father.

Physical examination was absolutely negative. There was some tenderness over Me-Burney's point. The pupils were markedly dilated; but in general the examination was negative except for the fact that the boy was rather dull and emotionally unstable.

The blood count revealed the following: HB, 91%; RBC, 5.1 million; WBC, 7,000; differential, normal. Repeated urinalyses were negative. The blood Kolmer and Kahn were negative. Xray of the chest revealed normal heart, lungs, and bony structure.

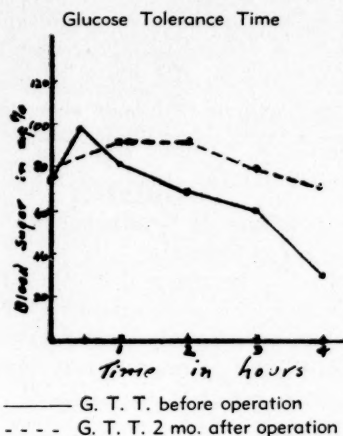
The patient had several bouts during his first stay in the hospital, and in a typical attack he complained of dyspnoea, could be found tossing restlessly in bed, breathing noisily and rapidly, rubbing his hands and arms frantically, and complained of intense numbness and tingling of the extremities. Following an attack the right arm would assume a coarse jerking or "pill-rolling" motion which the patient was unable to control for several hours. A neuropsychiatric consultation revealed no positive findings. An xray examination of the cervical vertebrae was negative. The patient was discharged from the hospital on August 7, with the diagnosis of petit mal like attacks superimposed upon a hypersensitive autonomic nervous system.

On August 25th he was seen in the medical clinic and was re-admitted because of a recurrence of the attacks as on previous admission. In addition the patient complained of precordial pain. Physical examination was again negative except that the jerky motions of the right upper extremity were now persistent.

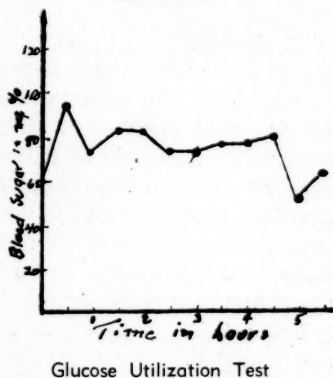
Routine studies were again done and found normal. Other studies included a sedimentation rate, which was 12 mm. in one hour, a normal icterus index, a bromosulfalein test which showed no retention at the end of 30 minutes. The BMR was plus 18. An xray of the skull disclosed a normal sella turcica. A gastro-intestinal series showed no evidence of pathology. A glucose tolerance test was done and a flat curve was found with an abnormally low fasting blood sugar, as shown in graph 1. During this test the patient was closely observed and his reactions noted. At

the end of the fourth hour things happened. The notes on the nurses' record were very descriptive: "The patient seems extremely ner-

GRAPH 1



GRAPH 2



vous at this time. He tosses his head from side to side, doesn't answer when spoken to; he keeps pulling at the bed covers, throwing himself about, rubbing his hands and mumbling they are numb. There is an agonizing expression on his face." The blood sugar at this time was 30 mg. %.

Several days later the patient, now on a high carbohydrate, high protein diet showed some improvement. He had no more attacks but the muscular twitching of the right upper extremity persisted. A glucose utilization test was done, using 10% glucose in normal

saline intravenously. The results are tabulated in graph number 2. It was found the highest blood sugar reading was 94 and the lowest 50 mg. %.

On September 20, 1945, the patient was taken to the operating room and a subtotal pancreatectomy was done by Dr. Lawrence J. Jones. The recorded technique is as follows:

Spinal anesthesia administered. An upper abdominal longitudinal incision was made, with separation of the recti muscles. The pancreas was exposed via the gastrohepatic route, the stomach was retracted upward and the transverse colon downward. The head of the pancreas was palpated between the thumb and index fingers following incision of the posterior parietal peritoneum along the greater curvature and the second portion of duodenum with the insertion of one finger through the incision to the posterior aspect of the head of the pancreas. A subtotal pancreatectomy was indicated. The distal portions of the gland was freed by sharp dissection dividing and ligating vessels as they appeared. The body of the pancreas was dissected up to the level of the superior mesenteric vessels and at this point it was transected. A grooved director was inserted from above between the superior mesenteric vessels and the neck of the pancreas to protect them from accidental injury. The remaining stump was ligated en masse. The abdomen was closed with a small soft rubber drain inserted to the pancreatic stump.

The fasting blood sugar pre-operative was 60 mg. %. When the operation was started the patient was given 1000 cc of 10% glucose. Just before transection of the pancreas the blood sugar was taken and found to be 240 mg. %. This hyperglycemia was temporary and was considered a favorable sign. The blood sugar 1 hour after operation was 200 mg. % and on the following morning 137 mg. %. On subsequent days the blood sugar was between 70 mg. and 96 mg. %, never

reaching the pre-operative level which was 60 mg. %.

The patient made a very uneventful recovery. The muscular twitchings of his arm ceased and in about a week the patient was feeding himself with it. There has been no recurrence of the spells the boy was wont to have and there has been no complaint of any of the symptoms he had prior to the operation. He has returned to his home and resumed his work. He is more alert at the present time than he ever had been while under our observation. A follow-up glucose tolerance test was done on November 12th and it also is shown in graph 1.

The pathological report in this case was "normal pancreatic tissue." Dr. Douglas M. Gay reported the following:

Gross: 55 grams of normal appearing pancreas.

Microscopic: The structure of the pancreas appears entirely normal and special stains show a normal distribution of alpha and beta cells in the islands of Langerhans.

DIAGNOSES AND DIFFERENTIAL DIAGNOSES

The diagnosis of hyperinsulinism appears rather simple with the multiplicity of symptoms, all of which can be readily recognized in diabetic patients when due to an overdose of insulin. Conn¹¹ gives an excellent classification of spontaneous hypoglycemia. In the differential diagnoses one must eliminate all extra-pancreatic disorders which produce hypoglycemia, such as disturbances in the pituitary, in the thyroid, and in the adrenal glands. Liver disease, infections, and poisons also produce hypoglycemia and their possibility must be investigated. In the hypoglycemic cases, however, one does not find the spells that are seen in hyperinsulinism due to pancreatic hyperplasia or tumor. Other conditions to be considered in the differential diagnoses include epilepsy, hysteria, brain tumor, and acute delirium. Among the gastro-intestinal disturbances that produce hypoglycemia are peptic ulcer and vagotonia.

Whipple⁵ has outlined the following criteria for making the diagnosis of hyperinsulinism:

1. An abnormally low fasting blood sugar, usually below 60 mg. %.
2. The characteristic symptoms associa-

ted with a low blood sugar level at the time of the attack.

3. Relief of these symptoms dramatically upon giving glucose.

A distinctive sugar tolerance test clinches the diagnosis. In cases of hyperinsulinism a flat curve is usually found, as described by Womack¹², and the test should be prolonged until the fourth or fifth hour when the usual hunger and jittery condition becomes manifest.

TREATMENT

The treatment of hyperinsulinism can be summarized as follows:

1. Diet—a ketogenic diet with a fat content of 200 grams is recommended. The diet should also be relatively high in proteins because of the well-known fact that slowly utilizable carbohydrate is thus afforded.
2. Frequent meals have also been recommended. In these cases, however, obesity may become a very important and disturbing problem.
3. The question of malignancy and the hopelessness of the case without surgery early must be considered. In those cases in which a tumor is found removal of this tumor, which is usually single, will be followed by a complete cure. In most cases so far reported the tumor has occurred in the tail of the pancreas. On several occasions, however, multiple tumors have been found. If no tumor is found at operation and the criteria had previously been satisfied, partial pancreatectomy has been advocated.

In 1933, Judd, Allan, and Ryneerson¹³ reviewed 12 cases in which pancreatic tissue had been removed. These authors felt that with the removal of part of the gland diminished activity of the pancreas would follow. David⁶, in 1937, declared that partial pancreatectomy with removal of as much as four-fifths of the gland should be done to relieve the symptoms of persistent hypoglycemia when no tumor of the pancreas was found at operation. Harris S., Jr.¹⁴ reported rather disappointing results in a series of cases in which subtotal pancreatectomy had been done where no tumor of the pancreas had been found. Whipple¹⁵ feels that poor results may be due to having overlooked the tumor of the head

or to insufficient removal of pancreatic tissue. It is interesting to note that in those cases that have been followed up no alteration in the pancreatic physiology has occurred. The histology of the removed tissue may not be abnormal, as was found in the case here reported. Pfeiffer and Eisendorff¹⁶, Brush and McClure¹⁷, feel that subtotal pancreatectomy is the treatment of choice and that good results may be expected with sufficient removal of glandular tissue up to four-fifths of the gland, as previously advocated by David.

SUMMARY

A case history of hyperinsulinism has been presented, in which subtotal pancreatectomy, was done with favorable results. The diagnosis was made by observing the patient's peculiar mental and nervous manifestations, the syncopal attacks, the muscular twitchings, the low fasting blood sugar, the relief from the spells by giving glucose, and a flat sugar tolerance test, at the end of which, when the blood sugar had reached a critical level of 30 mg.%, a typical attack occurred. The patient, who previously was unable to hold down a job, is now fully employed and feels perfectly well.

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THE SURGICAL TREATMENT OF GASTROJEJUNAL ULCER

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It is a common experience in one's individual practice to see a varying number of peptic ulcers which have recurred at the site of or at some distance from the original ulcer, or those which have developed at the site of anastomoses between the stomach and jejunum commonly called marginal ulcer. This report is concerned with the latter, or better termed, gastrojejunal ulcer, which is the frequent cause of surgical failure in the treatment of stomach and duodenal ulcers. Certainly the passage of time has now sufficed to indicate that the simpler technique of gastroenterostomy fails to meet adequately the demands of a satisfactory operation, which to be successful must be physiologically sound as well as technically safe and correct. Fulfillment of the latter assures survival of the patient, and satisfaction of the first suggests that the patient will remain well and free from ulcer recurrence. Aside from fear of malignant degeneration in gastric ulcer, the tendency away from the conservative procedure toward the more radical gastric resection has been almost wholly due to recurrence of this lesion, and the hope has been that wider and more common use of subtotal gastrectomy will lower the incidence of gastrojejunal ulcer.

The various aspects of surgical management, such as the question of the best time for operation and the many technical problems, have produced a large amount of literature. A few reports have appeared claiming satisfactory results from a prolonged regime of medical treatment, but most surgeons have not been favorably impressed. It is only natural for patients who suffer ulcer relapse after the first operation to resist suggestion of further surgery. They first seek cure by medical means but usually without success, even as regards the relief of symptoms. The prospects of medical cure in gastrojejunal ulcer are very slim indeed as compared to the outlook in gastric and duodenal ulcers. Nevertheless, many surgeons recommend that a trial of adequate medical treatment be made, in the ab-

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sence of such indications of prompt intervention as perforation and repeated hemorrhages. It is true that strict dietetic and careful medical treatment with bed rest will often result in improvement, but resumption of normal activities brings on renewed symptoms. Such observations have led to the practice of submitting these patients to an extended period of medical treatment in the hospital before operation, which often results in regression of symptoms, decreasing operative risk, and more important, lowering the mortality rate for radical operation.

The following report is based upon recent experience with two cases of gastrojejunal ulcer, both of which had primary operation of posterior gastroenterostomy. This number is modest indeed but I feel there is sufficient interest in the surgical treatment which slightly differs in each case, according to the pathologic situation involved. In one case the posterior ulcer eroded into the pancreas, requiring preliminary disconnection of the gastroenteric anastomosis; in the other case, with a nonfunctioning gastroenterostomy, the ulcer penetrated into the mesocolon resulting in considerable inflammatory reaction and infiltration of the neighboring structures, and necessitating block resection of the ulcer-bearing gastrojejunal segment which was first devascularized, and a segment of bowel resected, followed by reestablishment of continuity of the upper gastrointestinal tract. This operation presented great difficulties and was attended with much danger to the patient, had it not been for controllable safeguards used in the performance of modern gastric surgery, which in recent years have reduced the mortality rate of subtotal gastric resection to the neighborhood of ten per cent. According to Lahey the mortality in his clinic during the last year and a half has been practically reduced to zero.

CASE 1

The patient is a white woman, a housewife, 54 years of age, admitted to St. Francis Hospital, November 13, 1944. Her complaints were severe epigastric pains and inability to swallow food, with loss of appetite and weight. She had been ill for five years since her last operation, and for six weeks previous

to admission had severe attacks of pain which gradually became more constant and more pronounced, accompanied by severe bouts of cramp-like pains lancing through the entire abdomen and up into the lower midline of chest. She was able to swallow only liquids and semi-soft foods, and had lost 15 pounds of weight. She had a constant feeling of nausea with these pains but no vomiting; the pain was not relieved by food and seemed worst during the night, which prevented sleep. She had been constipated for the past six weeks, and had noticed no tarry nor bloody stools.

The past history was significant only because of several major operations; first, during her first pregnancy 21 years ago she was operated on for uterine fibroid, but the pregnancy was uninterrupted and she had only one child since. Over a period of years she had had a complete hysterectomy, appendectomy, subtotal thyroidectomy for toxic goitre, and five years ago a posterior gastroenterostomy was done for duodenal ulcer, at which time her gall bladder was also removed. She stated that she had never been well since the last operation.

Physical examination revealed emaciation and pallor. The weight was 86 pounds. The heart and lungs were normal; the blood pressure was 110/80. The abdomen showed very little subcutaneous fat, moderately distended with rigidity and muscle-guarding tenderness to palpation over the entire abdomen more marked in the epigastrium. No masses were palpable, but three well-healed scars were present, one in the mid-epigastrium and two near the midline above the pubes. The extremities were emaciated; the reflexes were normally active. The impression gathered from the history and physical examination was carcinoma of the stomach and partial obstruction of the duodenum due to post-operative adhesions. The blood count showed 3,590,000 red cells; the white count 11,000; with normal differential, and hemoglobin 79%. Urinalysis showed no abnormal findings except a trace of albumen. Blood sugar was 80 mgs. per 100 cc.; blood urea, 14 mgms. and total serum protein, 6.68%. Blood Kolmer and Kahn were negative.

Gastric analysis was not done in the hos-

pital, but the referring physician reported findings in his office showed acid values were a little less than normal limits. Gastrointestinal xray examination on November 2nd before admission to the hospital revealed a large ulcer in the midportion of the stomach on the lesser curvature, with 50% residue at twelve hours film. Again on November 30th xray studies were repeated with the following report: "The stomach was not completely filled with barium and there was a functioning gastroenterostomy with marked tenderness over the stoma. A marked hypertrophy of the gastric rugae was noted fluoroscopically and was also seen on the radiographs. A large outpouching on the lesser curvature was present in the middle third, measuring 5 cm. across its base. After five hours the stomach still retained some of the barium and the head of the meal had reached the cecum." Xray diagnosis was marginal ulcer and a large stomach ulcer on the lesser curvature.

Because the patient did not improve on routine medical treatment in the hospital within a reasonable time and there was a possibility of malignancy in the stomach, surgery was advised. She was prepared for operation with gastric lavage through indwelling nasal catheter, transfusion of 500 cc. of whole blood, and 1000 cc. of 5% glucose in saline was given intravenously to increase and maintain the necessary fluids and electrolytes.

On December 18th the patient was operated on under continuous spinal anesthesia. The lesser curvature of the stomach in its whole lower third was found involved in a firm but healed contractural scar and with very scant adhesions from previous operation. The liver appeared normal and no metastatic nodes were found in the mesentery. The gall bladder had been previously removed. There was evidence of healed ulcer in the anterior wall of the first portion of the duodenum just beyond the pylorus. A fairly large and fixed indurated mass was felt on the posterior wall and to be certain of the character of the lesion, the anterior wall of the stomach opposite the mass was opened, and a large round ulcer crater about the size of a half dollar was visualized. It was deep and adherent to the underlying body of the pancreas. The

ulcer was situated immediately above the artificial stoma on the gastric side. The gastroenteric anastomosis was carefully dismantled and the opening in the jejunum was closed transversely with two rows of fine gastrointestinal sutures. The pyloric portion of the stomach was mobilized, and the divided stump closed. In the process of further mobilizing the stomach preparatory to resection the posterior wall was torn around the ulcer margin, leaving the base of the ulcer on the pancreas, which was palpably firm and indurated from inflammatory reaction. Over one-half of the stomach was transected and removed, and the cut end anastomosed posteriorly to a loop of jejunum in Hoffmeister fashion. The pathological report showed gastric ulcer with no evidence of cancer.

The operation lasted three and one-half hours and the patient was in fairly good condition throughout, with no evidence of shock, during which time she received 750 cc. of whole blood and 1000 cc. five per cent glucose in saline solution. The patient made a strikingly smooth recovery and proved to be more cooperative than she was before the operation, tolerating what seemed previously an unbearable indwelling nasal catheter for continuous gastric suction and intravenous feedings for seven days, and was given only one transfusion of 500 cc. whole blood after the first day of operation. The average temperature during the first five days was 100 degrees; the highest was 103 degrees on the third post operative day. After the sixth day the pulse and temperature came down to normal and stayed down evenly throughout the balance of her stay in the hospital. She was discharged January 6, 1945, 18 days after the operation. The follow-up course showed that she made a steady improvement and was symptom-free from ulcer, having gained 14 pounds in five months, when she was last heard from in another state stating that she could not obtain enough red points to satisfy her increasing appetite.

CASE 2

A white male, aged 39, a machinist by trade, was admitted to the hospital on September 4, 1945, with complaint of pain in the midepigastrium for about eight months dura-

tion. He had had his pain in the epigastrium and periumbilical area for about 10 years, and was operated upon for duodenal ulcer two years ago. He was slightly relieved by taking food and soda and by vomiting; and described the pain as a constant gnawing which occasionally awakened him from a sound sleep. He was previously hospitalized from May 18th to June 2, 1945, for observation and medical treatment of gastrojejunal ulcer and was put on a routine ulcer diet which failed to give him relief. His appetite was poor and he had lost 20 pounds of weight since the last operation.

The past history was essentially negative except for a knee operation in 1929. At the age of 9, he had had "growing pains," suggestive of rheumatic fever. Review of his old chart showed that on October 28, 1943, a "posterior no-loop gastroenterostomy was done for obstructing ulcer just beyond the pylorus without adenopathy in the gastrohepatic omentum."

Physical examination showed a fairly well nourished but slightly anemic adult male in no apparent distress. The chest was resonant to percussion and no rales were heard. The heart was not enlarged and had a normal rate and rhythm, with a slight mitral systolic murmur and an accentuated second sound. Blood pressure was 128/70. The abdomen was moderately scaphoid and tender to palpation, particularly just above the umbilicus. There were no abnormal masses but tenseness in the abdomen was evident. No regional adenopathy was present. The extremities showed no atrophy nor tremors, and the reflexes were physiologically active. The impression from this history and findings was a marginal ulcer or a gastric ulcer with carcinoma of the stomach as a possibility.

The laboratory findings showed red count of 3,410,000; white count of 5,500, with normal differential, and a hemoglobin of 62%. Urinalysis, negative; blood Kahn, negative; blood sugar, 90 mgms. per 100 cc., and blood urea, 14. Gastric analysis of the fasting specimen showed a free HCl of 40 and a total acid of 45. Fractional, alcohol test meal showed an increase of total acids to 70 after the first and sixth specimens. Xray and flu-

oroscopic examination showed "non-functioning gastroenterostomy with sharply localized tenderness over the greater curvature of the stomach and transverse colon. The barium passed through the duodenum normally, with tenderness over the region of the gastroenterostomy, suggesting marginal ulcer."

Since the patient has had ulcer symptoms for ten years and adequate medical treatment failed to relieve him, with recurrence of marginal ulcer after gastroenterostomy, operation of subtotal gastric resection was advised.

On September 10, 1945, under continuous spinal anesthesia, the operation was performed. External evidence of healed scar was found just beyond the pylorus with a posterior gastroenterostomy present, surrounded by extensive inflammatory infiltration and induration of adjacent structures, particularly the mesocolon on the side of the efferent loop of jejunum. Because of this marked degree of infiltration, Devine operation was decided upon instead of disconnecting the anastomosis. After division of gastrohepatic and gastrocolic omentum above area of anastomosis, the stomach was transected high above the ulcer-bearing segment and about two inches each of the afferent and efferent loops of jejunum were divided, thus devascularizing the gastrojejunal segment. The continuity of the jejunum was restored by end-to-end anastomosis and the gastrojejunal segment containing the ulcer was mobilized toward the distal segment of the stomach which was divided near the pylorus. The duodenal stump was closed with two rows of sutures. A long loop of jejunum was brought through the mesocolon and a retrocolic Polya anastomosis was done. Pathological examination of the removed specimen "revealed the stomach and jejunum communicate by artificial opening of less than 3 cm. in diameter due to cicatricial contracture about the ulcer on the gastric side." No sections were made but tissue diagnosis of marginal ulcer was reported.

Routine postoperative care was instituted with gastric suction, blood transfusion and intravenous fluids, with gradual stomach feeding up to the tenth day when he was put on a regular house diet. The recovery was un-

eventful, with temperature no higher than 102 degrees on the third postoperative day. He was out of bed on the 12th day and discharged from the hospital 16 days after the operation. On account of a small serum collection in the upper angle of the incision he reported to the office for dressings five days after he was discharged. He is now free from ulcer symptoms; has no distress whatsoever after meals, and no special limitation in diet. In the past two months since the operation he has gained 15 pounds of weight.

SUMMARY AND CONCLUSIONS

Two cases of gastrojejunal ulcer which were intractable to medical treatment after a gastroenterostomy for primary ulcer of the duodenum are presented. Subtotal gastric resection seems the only rational procedure to apply in this type of case, although the risk is greater than that of subtotal gastrectomy performed for gastric and duodenal ulcer. Consideration of risk alone has weighed heavily in the balance against favorable surgical judgment of this method and yet experience in the above cases has proven that it is the only type of operation which offers any reasonable assurance of permanent cure.

Exceptions are occasional bad risk patients on whom, because of age, weight, and general condition and the type and location of the ulcer, it is infinitely better to do a conservative procedure with which one is not as well satisfied but to which is attached a lower mortality rate. It is a matter of good surgical judgment to do the type of operation best suited to the needs and demands of the patient, rather than have the patient fit the operation one wishes to perform.

Aside from the technical aspect of gastric resection, in which no other type of surgery requires more meticulous care and refinement in execution, two factors were of valuable importance in determining the successful outcome of these cases, namely—the routine use of whole blood transfusion, before, during, and after the operation; and the employment of continuous spinal anesthesia in accordance with the technique of Lemmon, which unquestionably provides better relaxation, eliminates postoperative shock and pre-

vents pulmonary complications in a time-consuming abdominal operation.

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CERVICOFACIAL ACTINOMYCOSIS* Successfully Treated by Penicillin and Repeated Aspirations

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and

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Actinomycosis is a specific infectious disease caused by the actinomyces bovis, or ray fungus. It is characterized by the development of granulomatous tumors which commonly break down and discharge a seropurulent fluid in which are seen characteristic sulfur yellow granules. The disease occurs chiefly in cattle and in man. The mode of origin of the disease is unknown. Many observers believe that the organism may gain entrance to the body through the medium of a carious tooth or an abraded gum.

The incubation period may be a matter of weeks or months. There are three regions of the body where actinomycosis commonly occurs: the head and neck, the thorax, and the abdomen. There are reported cases of actinomycosis of the tongue, kidney, urinary bladder, female generative organs, and bone. The commonest location for the disease is the face and neck. In the cervicofacial type the pathological process begins generally in the tissues of a carious tooth and extends outward to involve the skin of the face and neck. Subcutaneous nodules and infiltrations develop which vary in size from a pea to a walnut. They are purplish red in color, and these first nodules are followed by the development of other groups. As they enlarge the skin over the growths becomes tight and red. The growths soon break down in their centers with the discharge of seropurulent material in which are found the sulfur yellow granules which contain the actinomycetes. Sinuses are

* From the Medical and Surgical Services, St. Francis Hospital.

formed as the disease progresses. The disease produces few subjective symptoms.

CASE REPORT

A white male, age 45, an accountant, was admitted to the St. Francis Hospital, October 28, 1944. Six weeks previous to admission he had a left lower molar tooth extracted. Four days after this, limitation of motion of the jaw had developed. He was treated with sulfa drugs during this interval without improvement. We saw this patient while on sulfa therapy and advised hospitalization. On admission his temperature was 100.2 F.; pulse 100; W. B. C. 12,000; normal differential count. All other laboratory studies were negative, including a negative Kolmer and Kahn test. Xray examination of the left mandible was negative. The outstanding complaint was the inability to open his mouth. We could not open his mouth more than 2 cm. A slight amount of drainage was evident where the molar tooth was extracted. Over the angle of the left lower jaw and neck was present a mass measuring 9x7x4 cm. There was slight increase in heat. It was tender on pressure. Pus aspirated through the cheek contained large number of sulfur granules. Stains were positive for actinomycosis.

One hundred and fifty thousand Oxford units of penicillin was given every twenty-four hours, by the intramuscular route. After four days our supply of penicillin was terminated. We then started sulfadiazine in full therapeutic doses. This was continued for twelve days. The patient at this time was improved and the mass had decreased in size. He remained well for several months, during which time he was working in the middle west. On his return to Wilmington he noticed that the mass was getting larger. He was again admitted to St. Francis Hospital on April 3, 1945. At this time the mass was large, very tender and warm to touch. Again limitation of motion of the jaw had developed.

Fifty thousand Oxford units of penicillin was given every three hours night and day for nine days. The dose was then reduced to thirty thousand units every three hours for the next twelve days. Aspiration of pus from the abscess was performed on four occasions during his hospital stay. At the end of five

weeks there was very little evidence of tumor and the patient was asymptomatic. Now, nine months later, the patient has remained asymptomatic, and examination reveals no evidence of previous disease.

COMMENT

This case supports the "endogenous" theory of infection, which suggests that the pathogenic organisms are more or less constantly present in the mouth and alimentary tract, rather than the "exogenous" theory, which suggests that the infective organisms are taken into the mouth accidentally and at once penetrate into the tissues.

The history of the treatment of actinomycosis includes the employment of substances which have been believed from time to time to have a specific action on the actinomycete. The most widely used, before the availability of the sulfonamides and penicillin, have been the iodides and thymol.

Wide surgical drainage was used with these drugs. Most surgeons believed that no beneficial results are to be expected in the absence of wide surgical drainage. In cases cured by these methods prolonged healing of open wounds and conspicuous scars are the uniform result. Some workers in this field speak highly about the use of xrays and radium locally. Actinomycosis is a disease which has no uniformly satisfactory method of treatment. It is well known that different strains of actinomyces differ greatly in their sensitivity to penicillin and the sulfonamides. In this case the sulfa group of drugs failed to produce a cure. However, a cure was accomplished using penicillin and repeated aspirations. This patient has remained cured now for a period of nine months. Examination reveals no evidence of previous disease. The absence of conspicuous scars in this instance is highly satisfactory to both patient and physician.

Among white women the death rate from tuberculosis is higher in rural areas than in urban areas. The rural rate exceeds the urban rate for all ages, except the very youngest. Jacob Yerushalmy, M. D. & Charlotte Silverman, M. D., *Am. Rev. Tbc.*, May, 1945.

+ Editorial +

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THANKSGIVING

For the first time in four years comes America's most individualistic national holiday, and peace—of a sort. True, real peace is perhaps just around the corner, in another year or so, but this Thanksgiving is doubly given because at least the shooting has stopped. What a war it was! In our execration of the fiendish paperhanger we were led to cry out that only a Hitler could invent "total war," in which innocent men, women, children, animals, and property were so ruthlessly sacrificed. But we were wrong—in The Book (1 Samuel, chapter 15) we read of the world's first "total war," so after all these years, (from B. C. 1080 to A. D. 1940), the warring mind of man has changed but little. What a war it was! So we give thanks that if peace is not here, neither is war.

Our men are coming home. Only yesterday an authoritative government official radioed that every soldier in the ETO with sixty points would be home by Christmas! And 2,500,000 men in the ATO, with seventy points, would be home by Christmas!! So we give thanks that our men are coming home.

Our doctors are coming home. Already a goodly percentage of our local profession is out of the services. The homeward movement is being accelerated, and while officers cannot be demobilized as readily as soldiers, Washington has at last heard the rumble of the wrath of the folks back home. And it won't be too long now before they are all let out. So we give thanks that our doctors are coming home.

And there are other things we give thanks for: comfortable housing, food to eat, clothes to wear, schools to attend, radios to hear, newspapers to read, movies to entertain, churches for worship! Ah! So many things, and for the moment they outweigh the other many things that bring us anxiety for today and fear for tomorrow: Strikes and threats—unionism gone crazy—juvenile delinquency—impending inflation—inconsistent, feeble foreign policy—Pearl Harbor scandals—reconversion squabbles—political medicine. Who could possibly give thanks for these? "America the beautiful" has so many ugly things!

Thanksgiving is a Mayflower concept, and we in Delaware, so close to Kennett Square, have a feeling of half-ownership in Bayard Taylor, "the poet of Kennett," and of half-authorship in his famous lines:

Thanks be to God for wintertime
Which bore the Mayflower up,
To pour amid New England shores
The treasures of her cup,

America's greatest poetic tribute to the Mayflower, and indirectly to the gift to America of the Mayflowerers—the unique and God-fearing festival of Thanksgiving. Ye men of Delaware, "continue in prayer, and watch in the same with thanksgiving," Col. 4:2.

OBITUARY

JULIAN ADAIR, M. D.

Dr. Julian Adair, 65, one of the foremost physicians of Wilmington, died on November 2, 1945, in The Memorial Hospital, where he had been a patient for several weeks.

A native of Youngstown, Ohio, Dr. Adair was the son of Asa and Mary Elizabeth (Hinkle) Adair. His parents moved to Wilmington when he was a youth. He was educated at the Episcopal Academy and Hahnemann Medical College, both in Philadelphia. He was graduated with the degree of Doctor of Medicine in 1902 and started practice in Wilmington.

He served as vice president of the board of directors of Group Hospital Service, Inc. He was a member of the staff of the Homeopathic (now The Memorial) Hospital for many years and was president of the staff of physicians at the time of his death.

He was a member of the American Medical Association, the Medical Society of Delaware, and the New Castle County Medical Society. In 1939 he was elected president of the Homeopathic Medical Society of Delaware. Dr. Adair also served on the city Board of Health and at one time was urged to be the Republican candidate for mayor but he declined to become a candidate.

During World War I he was a member of the Advisory Draft Board.

His fraternal affiliations included membership in the Masonic Lodge, the Royal Arch Masons, Lu Lu Temple, the Delaware Consistory, also the Ancient Order of United Workmen. He was also a member of the Wilmington Country Club.

Dr. Adair is survived by his wife, Mrs. Mary Gause Adair, whom he married in 1904; two daughters, Ellen, a former director of physical education at the Lennox School, New York, and Friends School, this city; and Mrs. Harold Plaisted, the former Elizabeth Adair, and two grandchildren.

He was a brother of the late Dr. Asa Adair, also a physician of Wilmington, and of the late Craig Adair.

Services were held on November 3, 1945, in Trinity Episcopal Church. Interment was private.

MISCELLANEOUS**Super-Markets Plan to Add Drugs**

The super-markets of the United States are planning to go into the retail drug business in a big way after the war, a survey just concluded by Super Market Merchandising indicates.

The industry plans to spend \$400,000,000 for postwar projects, approximately 3,000 new markets are planned, and two-thirds of the operators indicate that they will remodel.

Among the new services the supers intend to add are drugs, wines, liquors, tobacco, soda fountains, sandwich stands, restaurants, housewares and light hardware. In other words, the new super-market will be a Main Street under one roof.—*Bull. Del. Pharm. Soc.*, April, 1945.

Tuberculosis and Tobacco

"Statistical studies have not shown tuberculous infection or disease to be more frequent in users of tobacco than in those who abstain," says *The Journal of the American Medical Association* for August 11. *The Journal* adds that among tuberculous patients it has been found that those who smoke are apt to have a higher incidence of throat involvement and that such complications appear to be adversely affected by persistence in smoking. Most physiologists are convinced that, for the tuberculous patient, smoking can do no good and may do harm.

BOOK REVIEWS

New and Nonofficial Remedies, 1945, containing descriptions of the articles which stand accepted by the Council on Pharmacy and Chemistry of the American Medical Association on Jan. 1, 1945. Clth. Pp. 760. Price, \$1.50. Chicago: American Medical Association, 1945.

Each year a revised list of the articles which stand accepted by the Council on Pharmacy and Chemistry of the American Medical Association as of January first is published in book form under the title of "New and Nonofficial Remedies." The book contains the descriptions of acceptable proprietary substances and their preparations, proprietary mixtures if they have originality or other nonproprietary nonofficial articles, simple pharmaceutical preparations, and other articles which require retention in the book.

Some fifteen or twenty newly accepted

preparations appear in the 1945 volume. A large number of preparations have been omitted, mainly brands of official preparations. The general statement concerning these pharmacopeial preparations has been retained for the information of physicians.

As stated in the preface, the entire book has been scanned to bring it up to date with the latest medical knowledge. It is noted that the section "Articles and Brands Accepted by the Council But Not Described in N. N. R.," a vestigial remnant of which appeared in the 1944 volume, has now entirely disappeared.

This section appeared to have been a catch-all for brands of official articles the acceptance of which the manufacturers desired for reasons of prestige, and miscellaneous preparations which were not necessarily or importantly within the Council's scope and which did not require detailed description. Many of the official preparations have been transferred to the body of the book and the others deleted. One is struck by the large amount of medical information contained in this volume. Certainly no other compendium of comparable price contains so much.

Annual Reprint of the Reports of the Council on Pharmacy and Chemistry of the American Medical Association for 1944. Cloth. Pp. 238. Chicago: American Medical Association, 1945.

The Council on Pharmacy and Chemistry recently issued the thirty-sixth edition of the Annual Reprint of the Reports of the Council on Pharmacy and Chemistry of the American Medical Association. This volume contains in compact form not only the reports of the Council which have been published in *The Journal* during the past year but also some additional reports which were not considered of sufficient importance to be published in *The Journal*.

The present volume is quite unusual in that it contains not one report concerning a product found unacceptable. However, there are five reports on the omission of products from New and Nonofficial Remedies, mainly for the reason that they have outlived their usefulness, and in most cases the manufacturers have expressed their lack of desire for continued inclusion of their brands. These re-

ports are: Erysipelas Streptococcus Antitoxin and Antierysipelas Serum Omitted from New and Nonofficial Remedies; Ichthammol Preparations, Isarol, Ichthynat, Ichthyol, Omitted from New and Nonofficial Remedies and Soluble Ichthammol, Not Within the scope of New and Nonofficial Remedies; Iodine Compounds: Iodalbin and Stearodine; Iodo-Casein; Iothion; and Iodostarine; Omitted from New and Nonofficial Remedies; Mercuric Oxyeyanide, Mercuric Salicylate and Mercuric Succinimide Omitted from New and Nonofficial Remedies and Status of Antimeningococcic Serum and Meningococcus Antitoxin.

This volume is a veritable mine of information on subjects of general interest to the physician, pharmacist and the pharmaceutical manufacturer. The reports concern deliberations of the Council on general subjects ranging from the use of the Electron Microscope to the appraisal of new drugs. The report on Pathogenic Bacteria, Rickettsias and Viruses as shown by the Electron Microscope is noteworthy as being pioneer work in this field. The report on the Current Status of Prophylaxis by Hemophilus Pertussis Vaccine was prefatory to the acceptance by the Council on various brands of pertussis vaccines and pertussis vaccine combinations. The valuable and highly informative article on Local Treatment of Thermal Cutaneous Burns reports on the latest and best work in this field.

A Textbook of Surgery By American Authors. Edited by Frederick Christopher, Associate Professor of Surgery, Northwestern University Medical School. Fourth edition, revised and reset. Pp. 1548, with 1483 illustrations on 762 figures. Price, \$10.00. Philadelphia: W. B. Saunders Company.

This volume, written by Christopher and 200 contributors, is most welcome, as it brings the recent advances of surgery from masters in their respective fields, and constitutes a cross section of the best in American practice. While comparatively concise, it attains its goal of maximum authority, the list of contributors constituting a veritable Who's Who of American surgery. There are 19 new sections in this fourth edition. Debatable or incomplete methods are not included. Etiology, pathology, diagnosis, and treatment are all

covered adequately. In addition to the subjects usually included in a surgical work, this volume includes chapters on orthopedic, urological, gynecological, and plastic surgery. The illustrations are excellent, as is the index.

A book of this type and size occupies a unique position, between the handbooks and the manuals on the one hand and the monographs and systems on the other. The medical school student wants a manual—that's all he can absorb; the experienced surgeon wants a system or a special monograph, but seldom has the time to consult it properly, in which case he is devoutly grateful for his Christopher. This is a book we can recommend without reserve.

Pathology of Tropical Diseases. By J. E. Ash, Colonel, M. C., U. S. A., Director, Army Institute of Pathology, Army Medical Museum; and Sophie Spitz, M. D., A. U. S., Pathologist, Army Institute of Pathology, Army Medical Museum. Pp. 350, with 941 illustrations, 15 in color, on 257 plates. Cloth. Price, \$8.00. Philadelphia: W. B. Saunders Company.

This book appears at a most opportune moment, for millions of our soldiers are being demobilized and discharged and many of them will have some type of tropical disease. This is the first book in American literature on the pathology of these diseases. While naturally the "pictures make the book," from the standpoint of the pathology, there is a clear and concise text which includes the definition, etiology, epidemiology, clinical features, laboratory findings, and pathology of each disease. The book, appropriately, does not include treatment.

Coming from the world's leading repository of tropical disease data, Colonel Ash and his collaborators reflect great credit upon the institution they represent and upon American medical science for their production of this much-needed volume. Besides the pathologists there are a lot of other doctors who will find this book most helpful.

A Manual of Surgical Anatomy: Prepared under the auspices of the Committee on Surgery of the Division of Medical Sciences of the National Research Council, by Tom Jones and W. C. Shepard. Pp. 254, with 267 illustrations on 138 figures, 153 in colors. Cloth. Price, \$3.00. Philadelphia: W. B. Saunders Company, 1945.

This is the baby brother of the book reviewed in THE JOURNAL, June, 1945, p. 127, which we described as excellent for civilian as well as military adoption. The page size and the illustrations are about 60 per cent of that of the original form, and are even smaller than those of the other Military Surgical Manuals, whereas the original edition was considerably larger. Why was not the original edition the exact mate of the other Military Surgical Manuals? Seems to us a lot of paper (is it still precious?) and effort could have been spared. Even so, we still say it's a good book.

The Story of Blue Cross. By Louis H. Pink, President, Associated Hospital Service, New York City. Pp. 31. Paper. New York: Public Affairs Committee, 1945.

This is Pamphlet No. 101 of the Popular Series published by the Committee. This one, by the former insurance commissioner of the state of New York, is a very readable and informative recital of the origin and rise of the Blue Cross movement in this country. One spends a very profitable hour reading this brochure.

New Goals for Old Age. Edited by George Lawton, Director, Old Age Counselling Center, New York City. Pp. 210. Cloth. Price, \$2.75. New York: Columbia University Press, 1945.

This volume contains 15 chapters, each by a different author. From the first chapter, a psychiatrist's view of adjustment over the life span, to the last, in which an anonymous contributor tells with wisdom, humor, and charm how it feels to be seventy-five, the volume is packed with suggestions as to the capabilities of older people, as well as their limitations, their relation to the community as well as to the family, and their potential contribution to our society as well as their demands upon it.

Social workers, psychologists, administrators of old-age assistance, and others who work with the elderly have come to realize that old people have resources for useful, happy living which are almost untapped today. This book, which sets forth some of the more recent ideas concerning the nature and needs of older people, is a stimulating expression of this new point of view.

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